

**I CLAIM :**

1. A method of enabling on-site calibration of an instrument that measures vibration in a machine to assure that the instrument functions within instrument performance specifications, comprising the steps of
  - a. providing a calibration device capable of calibrating the instrument,
  - b. providing a database having a calibration procedure for said instrument,
  - c. connecting the calibration device to the instrument while the instrument is on-site,
  - d. connecting the calibration device to the database, and
  - e. accessing the calibration procedure in the database to cause the calibration device to calibrate the instrument.
2. The method of claim 1, including the steps of
  - c.1. providing the database on portable storage media, and
  - c.2. providing an on-site media access device for enabling the calibration device to access the database on the portable storage media.
3. The method of claim 1, including the steps of
  - c.1. providing the database at an internet-accessible remote site, and
  - c.2. providing on-site internet access for connection to the database at the internet-accessible remote site.
4. The method of claim 3, including the steps of
  - c.3. providing password-activated access to the remote site database, and
  - c.4. providing a password enabling on-site access to the remote database via the internet.
5. The method of claim 1, including the steps of
  - f. providing on-site means for printing a certificate of calibration, and
  - g. printing said certificate upon successful calibration of the instrument.
6. The method of claim 1, wherein the database includes calibration procedures for a plurality of different instruments.

7. Apparatus for enabling on-site calibration of an instrument that measures vibration in a machine to assure that the instrument functions within instrument performance standards, comprising a calibration device capable of calibrating the instrument, a database having a calibration procedure for said instrument, means for connecting the calibration device to the instrument while the instrument is on-site, means for connecting the calibration device to the database to access the calibration procedure in the database to cause the calibration device to calibrate the instrument.

8. The apparatus of claim 7, including portable media containing the database, and wherein the means for connecting the calibration device to the instrument includes a portable computer for accessing the portable media on-site.

9. The apparatus of claim 7, including a computer located off-site and containing the database, internet access means for accessing the database via the internet, and password-protection means for limiting access to the database via the internet.

10. The apparatus of claim 9, including password protection means limiting access to the off-site computer database.